

**ABSTRACT OF THE DISCLOSURE**

In a multi-access communications network, an interference cancellation (IC) method is used to reduce the interference between users and help increase the capacity of the network. A window is used in the IC method to cancel the interference on a user signal from other user signals within the window. The window then slides to process a different part of the user signals. This window slide may be accomplished using a full or a partial slide of the window. The present invention achieves a very small delay for the interference cancellation of user signals using a multi-stage interference cancellation method.